## ABSTRACT OF THE DISCLOSURE

An image pick-up unit inserted in the body picks up an image of the body, and transmits by radio the image to an extra-corporeal unit which is arranged outside the body. The image pick-up unit includes an image pick-up portion capturing an image, a data transmitting portion for transmitting the image obtained by the image pick-up portion to the extra-corporeal unit at a plurality of transmitting ratios, a characteristic amount detecting portion for detecting a predetermined amount of characteristics based on the image, and a determining portion for determining a valid image based on an output from the characteristic amount detecting portion. The data transmitting portion controls the data transmitting ratio in accordance with the determining result of the determining portion.